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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,921	06/28/2001	Udit Batra	20243CA	1812
210	7590	11/03/2005	EXAMINER	
MERCK AND CO., INC P O BOX 2000 RAHWAY, NJ 07065-0907			SHARAREH, SHAHNAM J	
			ART UNIT	PAPER NUMBER
			1617	

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/894,921

Applicant(s)

BATRA ET AL.

Examiner

Shahnam Sharareh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 48-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 48-50, 57-60 is/are rejected.
- 7) ☒ Claim(s) 51-56 and 61-68 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 16, 2005 has been entered.

2. The Declaration under 37 CFR 1.132 filed August 16, 2005 is sufficient to overcome the rejection of claims 51-56, 61-68 because the Declaration draws a difference between hydration behavior of croscarmellose sodium as the superdisintegrant, and other disintegrants typically used in the art and subsequently an unobvious modification of the prior art to reach the instant claims.

However, the Declaration is not commensurate with the scope of the claims 1, 48-50, 57-60 for the reasons of record.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1, 48-50, 57-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Makooi-Morehead US Patent 6,238,695 in view Remington: the Science and Practice of Pharmacy 19th edition (pages 1616-1620) (IDS, filed June 28, 2001) or Phipps US Patent 5,260,073.

Makooi discloses compressed efavirenz tablets comprising 300mg of efavirenz (50% by wt), sodium lauryl sulfate which is a surfactant, microcrystalline cellulose which is a filler/disintegrant, sodium starch glycolate or croscarmellose sodium which is a superdisintegrant, lactose which is a filler/compression aid and magnesium stearate which is a lubricant (see abstract; col 5, lines 16; col 7, lines 15-67; claims 12-15). Makooi teaches concentrations of efavirenz of 300 to 800 mg per tablet (see col 5, lines 36-39; claim 14). Makooi teaches the use of superdisintegrants in the art in amounts ranging between 1-10%. (see col 3, lines 35-40).

Makooi employs a wet granulation process to prepare his formulations (see col 5, lines 59-col 6, line9; example 3). Thus, Makooi's formulation would also contain a solvent such as water or ethanol to form an aqueous solution. (see col 5, lines 60-67; col 7, lines 19-20). Makooi's methods employs the same steps as the instantly taught, therefore, the final product of Makooi inherently contains and meets all limitations of the instant tablets.

Further, with respect to claims 57-60 Examiner states that the instant claims appear to be drafted as "product by process" claims. Accordingly, products by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps (see MPEP 2113). "Even though product - by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product - by - process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). Absent a clear structural or compositional difference, the products are viewed to be an obvious modification of the prior art.

Makooi fails to specifically employ 1-5 percent superdisintegrant or employ hydroxypropylcellulose as a binder.

Remington provides teachings for various types of pharmaceutically acceptable excipient that may be used to formulate compressed tablets (pages 1616-1620). For example, Remington on page 1618 sets forth binders such as various types of cellulose derivatives including hydroxypropylcellulose, or other types of binders such as starch or PVP are recognized in the art as art equivalent.

Phipps is also used to show that in formulating compressed tablets binders include polymeric binders such as hydroxypropylcellulose and disintegrants include croscarmellose, microcrystalline cellulose or crospovidone (see col 54-67).

Although Makooi's teachings does not specifically teach the instant concentrations of superdisintegrants or the use of hydroxypropylcellulose as the binder of choice, it would have been obvious to one of ordinary skilled in the art of dosage formulation to optimize the individual ingredients of Makooi's dosage forms by routine experimentation and further substitute any suitable art equivalent moiety known in the art such as hydroxypropylcellulose, as taught in Remington or Phipps, for the binder of Makooi to improve the pharmacokinetic characteristics of Makooi's dosage formulation.

#### ***Response to Arguments***

4. Applicant's arguments filed on August 15, 2005 have been fully considered but they are not persuasive. As has previously discussed on the record, Applicant argues that Makooi does not teach the instant amount of superdisintegrants in the instant ranges.

In response, Examiner states reiterates the response on record that applicant's position is based on an illusory distinction between the scope of the instant disintegrants and superdisintegrants, because neither the specification nor the art draws a distinction between the scope of the instant disintegrants and superdisintegrants. (see Final Rejection filed on June 7, 2004 and May 03, 2005). Accordingly, the ranges of superdisintegrants in Makooi's compositions are optimizable.

Further, the Declaration provided is not commensurate with the entire scope of the language "superdisintegrant." Rather, the distinction described between the superdisintegrants and the disintegrants is only applicable to croscarmellose. None of

the rejected claims are directed to croscarmellose. Thus, Applicant's arguments are not persuasive.

***Allowable Subject Matter***

5. Claims 51-56, 61-68 are allowed.

Claims 51-56, 61-68 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

This is a continuation of applicant's earlier Application No. 09/894,921. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action isAny inquiry concerning this communication or earlier communications from the examiner should be directed to Shahnam Sharareh whose telephone number is 571-272-0630. The examiner can normally be reached on 8:30 am - 6:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan, PhD can be reached on 571-272-0629. The

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fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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